

Research Notes

Surface-water Model System License Renewal Agreement

Pooled-fund Project TPF-5(266)

Lead Agency: Federal Highway Administration (FHWA)

Partners: CA, IA, KY, MN, NY, PA, TX

Date: 05/10/2014

Program Steering Committee (PSC): Design and Construction

Project Title: Enhancements to the FHWA-FST2DH Model for Simulating Two-dimensional Depth-averaged Flow and Sediment Transport TPF-5(248)

Project Number: P758

Task Title: Surface-water Model System License Renewal Agreement

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WHAT IS THE NEED

The Surface-water Model System (SMS) is a graphical user interface (GUI) for FHWA's FST2DH finite element two-dimensional depth averaged surface-water program used to model water surface elevations and velocities in floodplains, at highway crossings, and at structures (bridges, culverts, bridge piers). SMS and FST2DH are used to model flows in river and tidal environments. As such, SMS is considered a pre- and post-processor for two-dimensional hydraulic models.

In the past FHWA has been the sole source of funds to pay for the license agreement with the program developer Aquaveo, LLC. The current licensing agreement provides full access to the hydraulic modeling capabilities required by most State Departments of Transportation including Caltrans.

WHAT ARE WE DOING

The Federal Highway Administration will serve as the coordinator for this pooled-fund project to participate in renewing the free WMS license to State DOT employees.

WHAT IS OUR GOAL

The objective of these pooled funds is to re-new the SMS license agreement for another five years and continue to provide licenses of the software to all Federal and State Department of Transportation employees.

WHAT IS THE BENEFIT

The SMS licenses allow us to distribute the most recent versions of the Surface Water Modeling System, SMS Version 11.0. As a result of the new SMS license agreement, there has been an increase in both the number of licenses requested and training requests.

WHAT IS THE PROGRESS TO DATE

The SMS licenses has been obtained. As a result of the new SMS license agreement, there have an increase in both the number of licenses requested and training requests. The SMS and FST2DH will continue to be used by FHWA and many state DOTs to perform the hydraulic analysis of complicated or unusual hydraulic structures or environments so that the results can be visualized in a robust and easily understood manner.